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Online Consumer Retention: Development of New Habits

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Abstract

Prior research on online behaviour continuance modeled satisfaction and perceived usefulness as the only determinants of continued adoption, overlooking the important role of habit. We therefore extend the previous models to include online shopping habit as a moderator of the relationship between online shopping satisfaction and online repurchase intention. Most prior studies conceptualized habit as experience, providing little evidence on the distinction between these two constructs. To clarify this confusion, we compare the conceptualization and the effects of habit and experience on repurchase intention. The empirical results show that the inclusion of the moderating effects of both habit and experience strengthens the explanatory power of the model. Although there is sufficient evidence supporting the conceptual discrimination between habit and experience, their effects remain similar. We also identify important online shopping usefulness drivers, which should be of interest to practitioners.

1. Introduction

Customer retention is considered by both scholars and practitioners to be one of the critical success factors for retail businesses with its implications for cost savings and profitability. The cost of acquiring new customers is five to seven times that of retaining existing ones. Furthermore, retained customers enhance profitability with their lower sensitivity to price changes and their higher likelihood of referring new customers [16]. Customer retention is an

even more challenging issue in the context of online shopping, where the switching costs for customers are minimal. It is therefore important to identify the major determinants of online customer retention.

Prior marketing research posited customer satisfaction as one of the drivers of repurchase (e.g. see [19][31][32]). Most of these studies, however, were conducted in the traditional shopping context. It is not clear whether these previous findings can be applied in the online shopping setting. More recent information systems (IS) research adopted the marketing approach in explaining system usage continuance. For example, Bhattacharjee [3] modeled IS continuance intention as a direct outcome of satisfaction and perceived usefulness. However, the adequacy of explaining repurchase intention using satisfaction only is questionable [6]. It has been reported that only 15 %– 35% of satisfied customers did return [30]. It is therefore important to examine the role of potential moderators in attaining a better understanding of the relationship between satisfaction and repurchase intention [6][24][28].

To fill this theoretical gap, we integrate the marketing and IS theories to develop a better conceptual model that explains online customer repurchase intention. Specifically, we adopt a contingency approach including online shopping habit as the moderator of the relationship between satisfaction and repurchase intention. Furthermore, we clarify the distinction between habit and prior experience by performing a comparative analysis.

Our study presents both theoretical and practical contributions. On the theoretical side, we develop a contingency theory to better explain IS continuance in general and online repurchase intention in particular. To the

practitioners, we provide useful guidelines of achieving customer retention by identifying specific online consumer retention factors.

In the next section, we introduce and present the theoretical foundation of the research model. We then describe the research context and methodology, followed by a discussion of the empirical results. We conclude the paper by discussing the practical implications of the findings and suggesting directions for future research.

2. The Research Model

The theoretical development of our research model is grounded in the IS continuance theory proposed by Bhattacharjee [3], who argued that IS continuance intention is directly driven by satisfaction and perceived usefulness. His study integrates the technology acceptance model (TAM) [15] from the IS literature and the disconfirmation theory from the marketing literature. Following the marketing approach, Bhattacharjee [3] measured satisfaction as an evaluative outcome of a comparison process between expected and perceived performance known as confirmation [29]. IS continuance decisions are similar to repurchase intentions. Our research model (see Figure 1) extends Bhattacharjee [3]'s study to capture the moderating effect of habit on the relationship between satisfaction and repurchase intention.

Repurchase intention has been studied

extensively by marketing scholars. It is typically defined as the intention to repeatedly purchase a particular product or service over time (see [13]). Repurchase mirrors and constitutes one important dimension of loyalty [20][33]. Unlike other metrics such as click through ratios, repurchase can better capture the "process of retaining prior customers with repeat business" [23]. Actual repurchases are, however, based upon a number of factors such as the financial ability of customers that fall outside the scope of this research. Therefore, we chose to focus on the intention to repurchase rather than the actual repurchase behavior.

According to the technology acceptance model (TAM), perceived usefulness is one of the major determinants of continuance, or repurchase in the context of online shopping. It refers to the salient beliefs of customers regarding the instrumentality of repurchase [15]. Bhattacharjee [3] found that an individual is more likely to intend for continued usage when such usage is perceived to be useful. Consistent with these prior studies, we hypothesize that perceived usefulness is a direct determinant of repurchase intention.

Satisfaction is another major determinant of repurchase intention. It has been widely defined as a post-evaluative judgment over a particular purchase [1][11][26][27][29]. It is a facet of an attitude, which is modeled as an antecedent to intention according to the technology acceptance model (TAM) [15]. We therefore hypothesize

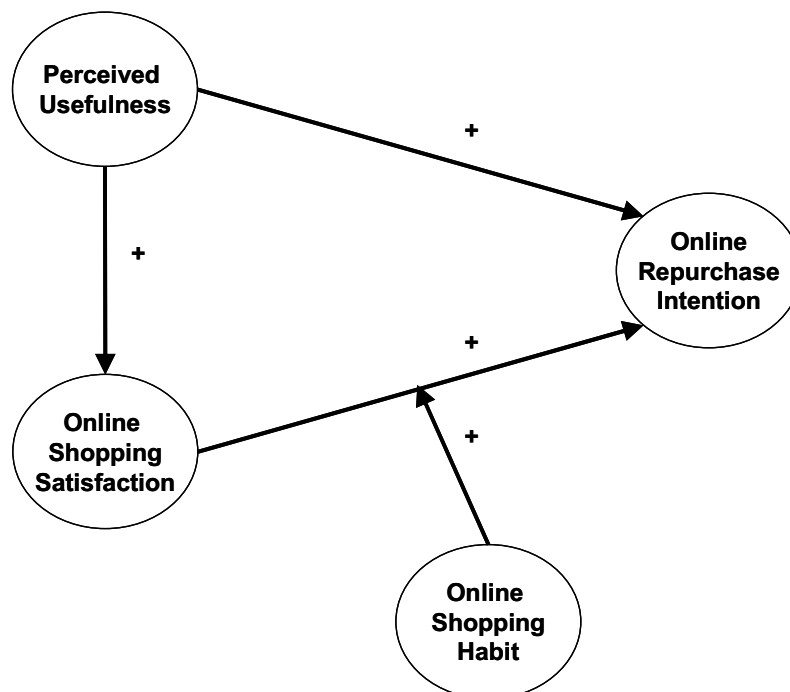


Figure 1. The Research Model

that online shopping satisfaction has a direct effect on online repurchase intention. A customer is more likely to intend to return if he/she is satisfied with the previous purchases. Unpleasant buying experience easily leads to dissatisfaction, discouraging the customer from coming back. There is ample empirical evidence from the marketing literature that customer satisfaction is positively linked to repurchase intention (e.g. see [19][32]).

The relationship between satisfaction and repurchase intention, however, is subject to the moderating effect of online shopping habit. Habit refers to "situation-behavior sequences that are or have become automatic... the individual is usually not conscious of these sequences" ([34], p. 204). It is a behavioral tendency resulting from prior experience. It can be viewed as an automatic behavioral response triggered by a situational stimulus. The individual is not necessarily aware of the behavior. In the context of online shopping, individuals with the habit of shopping online visit (i.e., the behavioral response) an Internet store instead of a physical outlet *automatically* without further consideration when he/she has shopping needs (i.e., situational stimulus). Previous literature reported on the effect of habit on adoption intention and post-adoption usage (e.g. see [2]). Very few studies, however, examined the moderating role of habit in the context of online consumer retention. Given an equal level of satisfaction, a customer who has acquired an online shopping habit is more likely to intend to repurchase than one without such habit. A customer who rarely shops online may not return despite that he/she is satisfied. Based on this discussion, we hypothesize that online shopping habit moderates the relationship between satisfaction and repurchase intention.

As for the operationalization of habit, most previous studies use experience as its surrogate measure (e.g.,[17]). Although experience is a precursor of habit, the two constructs are conceptually different. The formation of a habit is partly subject to the ability of the individual to convert/absorb the behavior into a cognitive schemata [21]. A prolonged usage experience does not necessarily imply that an individual has acquired the usage habit. We therefore develop two separate measurement scales for habit and experience, hypothesizing the conceptual discrimination between the two constructs.

As for the effects on repurchase intention, we expect both constructs to significantly moderate the relationship between satisfaction and

repurchase intention, as argued in the next section. The magnitudes of these effects, however, may vary.

3. Methodology

The research model was tested by conducting a survey study with 122 online customers in Hong Kong who have previously shopped from various Internet stores. We measured online shopping habit and online repurchase intention using reflective items that were validated through the card sorting procedure [22]. To identify specific usefulness factors, we relied on belief elicitation to develop a formative measurement model for the construct of perceived usefulness. We wanted to distinguish between the different phases of online shopping, i.e. pre-purchase, purchase and post-purchase experiences. Therefore we also measured satisfaction with formative items based on these phases. We generated an initial pool of formative items from a review of the literature. Twenty online shoppers were invited to participate in focused group discussions where they were asked to identify important usefulness factors. Based on the results of the belief elicitation process, we compiled a list of formative items presented in Table 1.

As respondents with more online shopping experience are likely to be more satisfied than those with less and hence introducing potential response bias, we performed a check on the response distribution for satisfaction. An even distribution of the responses indicated that the possibility of having such a bias should be remote.

Although we rely on the same respondents for the dependent and independent variables, the structure of the research model (i.e. moderating effects) minimizes potential common method bias. The moderating effects, if found to be significant, will provide a strong indication of the lack of common method bias [18]. While the respondents may anticipate the linear relationships and answer accordingly, they are not likely to predict the moderating relationships. Existence of a common method bias increases statistically the covariance among the independent variables, impairing the likelihood of detecting a significant moderating effect. Therefore, with the verification of moderating effects, the presence of a common method bias becomes highly unlikely [5].

3.1. Data analysis

The analysis of the data was done in a holistic manner using Partial Least Squares (PLS). The PLS procedure [35] allows the researcher to both specify the relationships among the conceptual factors of interest and the measures underlying each construct. The result of such a procedure is a simultaneous analysis of 1) how well the measures relate to each construct and 2) whether the hypothesized relationships at the theoretical level are empirically confirmed. Furthermore, due to non-normality of the data, LISREL analysis was not appropriate [4][9]. Tests of significance for all paths were conducted using the bootstrap resampling procedure [14]. For reflective measures, we adopt the standard approach for evaluation, where all path loadings from construct to measures are expected to be strong (i.e., 0.70 or higher). In the case of formative measures, Chin [8] suggested that the weights of each item to be used to assess how much it contributes to the overall factor. For the reflective measures, rather than using Cronbach's alpha, which represents a lower bound estimate of internal consistency due to its assumption of equal weightings of items, a better estimate can be gained using the composite reliability formula [8].

repurchase intention with PLS, we followed a hierarchical process similar to multiple regression where we compared the results of two models (i.e., one with and one without the interaction construct: online shopping habit x online shopping satisfaction) [10]. This approach is consistent with the guidelines recommended by Carte and Russell [7]. The standardized path estimate from the interaction term construct (online shopping habit x online shopping satisfaction) to online repurchase intention indicates how a change in the level of the moderator construct (online shopping habit) would change the influence of online shopping satisfaction on the dependent construct (online repurchase intention). By comparing the R-square for the interaction model with the R-square for the main effects model (which excludes the interaction construct), we can assess the strength of the moderating effect. The difference in R-squares was used to estimate the overall effect size (f^2) for the interaction where .02, 0.15, and 0.35 suggest small, moderate, and large effects respectively [12]¹. It is important to understand that a small f^2 does not necessarily imply an unimportant effect. If there is a likelihood of occurrence for the extreme moderating conditions and the resulting beta changes are meaningful, then it is important to take these situations into account. To ensure that

Table 1. Measurement Model

Factors	Variables	Weights	Loadings	Std. Error	T - statistics
Online repurchase intention ($\rho = 0.95$)	Item 1		0.92	0.02	56.18
	Item 2		0.93	0.02	53.89
	Item 3		0.95	0.01	96.18
Online shopping habit ($\rho = 0.91$)	Item 1		0.88	0.03	30.84
	Item 2		0.90	0.02	45.25
	Item 3		0.84	0.04	21.65
Online shopping experience ($\rho = 0.91$)	Item 1		0.91	0.02	36.76
	Item 2		0.86	0.03	30.50
	Item 3		0.83	0.04	20.23
Online Shopping Satisfaction	Post-purchase experience	0.57		0.10	5.83
	Pre-purchase experience	0.33		0.13	2.62
	Purchase experience	0.30		0.10	5.83
Perceived Usefulness	After-sale service	0.42		0.16	2.62
	Transaction efficiency	0.41		0.10	4.08
	Security	0.24		0.12	2.01
	Convenience	0.23		0.09	2.46
	Cost savings	0.20		0.10	2.02

In formulating and testing the moderating effect of online shopping habit on the relationship between online shopping satisfaction and online

¹ $f^2 = [R\text{-square}(\text{interaction model}) - R\text{-square}(\text{main effects model})] / [1 - R\text{-square}(\text{main effects model})]$

the moderating effects are tested and interpreted correctly, we follow the guidelines reported by Carte and Russell [7].

4. Results and Discussion

Table 1 presents the results of the test of the measurement model. The loadings of all reflective items are high (above 0.8) with significance at 1% level, demonstrating convergent validity. The composite reliability scores of all constructs are higher than the recommended benchmark of 0.80 [25], verifying internal consistency.

The weights and the significance of all formative measures indicate that the items contribute significantly to the formation of the intended construct. After-sale service and

We performed two tests to verify the conceptual distinction between online shopping habit and online shopping experience. First, we relied on the card sorting procedure. Habit and experience were classified into two separate constructs by the panel judges involved in the procedure, indicating face validity and hence discriminant validity. Furthermore, the square root of the AVE of the experience construct (0.87) is higher than the correlation of experience with habit (0.74), therefore demonstrating discriminant validity. Based on these results, we conclude that online shopping habit and online shopping experience are conceptually distinct constructs. The higher correlation value, however, suggests potential multicollinearity problem if both constructs are included in the same model.

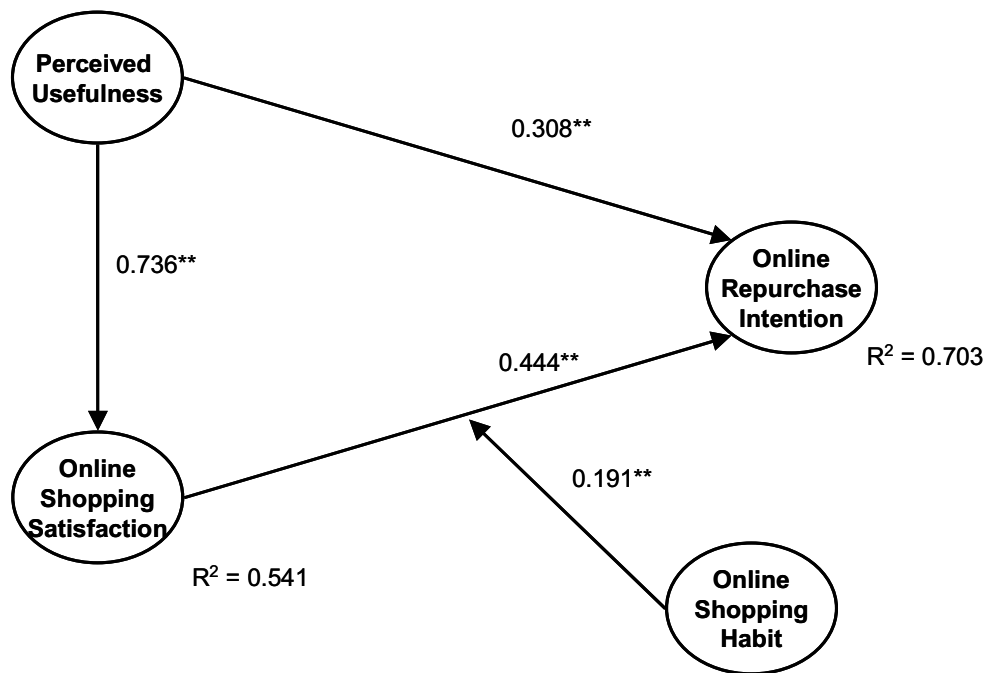


Figure 2. Results of PLS Analysis with Habit as the Moderator

transaction efficiency emerged to be the two most important drivers of perceived usefulness with a weight of 0.42 and 0.41 respectively, both significant at the 1% level. The effects of security, convenience and cost savings are comparatively small, but are nevertheless significant. A comparison of the square roots of the AVE scores with the correlations among the constructs provided support for discriminant validity.

Figures 2 and 3 provide the results of PLS analysis on the structural links of the proposed research model, using habit and experience as the moderator respectively. The estimated path effects are given along with the associated t-values. All path coefficients are significant at the 99% significance level providing strong support for all the hypothesized relationships. The model including habit as a moderator explains 70.3% for the variance of repurchase intention, compared to 66% for Bhattacharjee [3], suggesting good explanatory power of our model. The moderating effect of habit is verified,

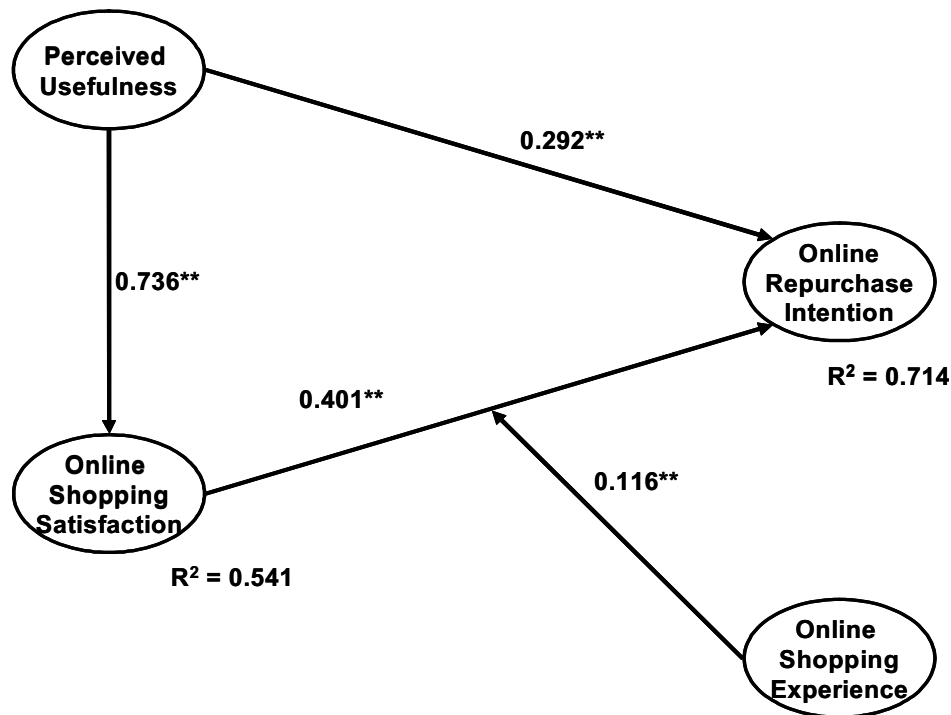


Figure 3. Results of PLS Analysis with Experience as the Moderator

as indicated by a path coefficient of 0.191 that is significant at the 1% level. The moderating effect has an effect size f^2 of 0.12, which represents a solid small and almost moderate effect, confirming our hypothesis that online shopping habit moderates the relationship between overall satisfaction and online repurchase intention. In other words, as online shopping becomes more habitual, the effect of satisfaction on repurchase intention becomes stronger. These findings imply that companies should focus on consumers who have acquired the habit of shopping online in allocating their marketing efforts, as these consumers are more likely to intend to repurchase when satisfied. That is, the effects of satisfaction on repurchase intention could be strengthened or weakened by the online shopping habits of the consumers.

We replicate the analysis using online shopping experience as the moderator to compare its effect with that of online shopping habit (see Figure 3). The results show that both the R-square (0.714) and the magnitude and significance of the moderating effect (path coefficient = 0.116; significant at 1% level) of experience are comparable to those of habit. We therefore conclude that, although there is evidence showing that the two constructs are

conceptually distinct, their effects remain similar.

5. Conclusion

In this study, we develop, operationalize and empirically test a model that explains online consumer retention as measured by repurchase intention. Earlier studies in the marketing literature modeled repurchase as a direct effect of satisfaction. Recent IS research suggested continuance intention to be an outcome of satisfaction and perceived usefulness. Our findings demonstrated that such models were not sufficient for explaining online shopping and that a contingency theory was needed, i.e. moderating factors of the link between satisfaction and repurchase intention should be included.

Our study presents important contributions. On the theoretical side, we provide a better conceptual model of online repurchase intention by introducing online shopping habit as the moderating variable. Our findings also verify the conceptual distinction of the habit and experience constructs and their similarity in the magnitude of moderating effects, confirming the validity of using experience as the surrogate measure for habit. On the practical side, our study suggests that marketing initiatives should focus specifically on customers who have

² $f^2 = .703$ (interaction model) - .663 (main effects model) / 1 - .663 (main effects model) = 0.12

acquired the related habit to yield higher retention rate. In the case of novel products or services with which customers have minimal habit, practitioners can examine their prior experience as a surrogate in prioritizing their marketing efforts.

Our findings present additional practical implications by identifying a list of salient usefulness drivers. To achieve online shopping satisfaction, post-purchase experience emerged to be the most dominant driver, highlighting the importance of after-sale services. Consistent with this result, we also found after-sale service to be the prominent driver of perceived usefulness of online shopping. As the entire purchase cycle experience is considered as important by customers, managers should implement value-added features or services that could further enhance the online shopping experience. For example, a search engine can be featured to enable comparative shopping in the pre-purchase cycle. Order tracking services can be provided during the post-purchase stage.

With a very similar weight as that of after-sale service, transaction efficiency ranked as the second key factor for perceived usefulness. The navigational design of the website should also be well-structured so that purchases can be made within a few clicks. The third most important driver is security, which implies that internet companies should adopt adequate measures to safeguard the security and privacy of online shoppers. Another important factor was identified as convenience. As internet stores are typified by their 24-hour availability, managers should ensure the stability of the technical system to enhance the store accessibility. Cost savings was ranked as the fifth significant factor. Managers should exercise special care in setting the pricing strategies for online stores, balancing off the benefit of price reduction against the possibility of conflicts with other regular sales channels.

In future research, this study should be extended to examine the effects of perceived usefulness and satisfaction on actual repurchase behaviour, which may provide additional insights to studying solely repurchase intention.

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